REMARKS

1. Objection

The title of the invention is neither precise nor descriptive.

Response:

The title is amended as per the examiner's request to be more descriptive. No new matter is introduced.

2. Rejections

Claims 1-3, 9-12, and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Den Boef et. al., US. patent 6,134,209. Claims 5-8, and 14-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Den Boef as applied to claims 1-3 & 9-12 above in view of Kelly, US. patent 6,557,126. Claim 4 and 13 are rejected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response:

The term 'compact' has been replaced by 'optical'. No new matter is introduced. Consideration of this change is politely requested.

Claim 1

Claim 1 is amended to include the limitations set forth in claim 4. Claim 4 is therefore

canceled. No new matter is added.

In the section entitled "Allowable Subject Matter" of the above cited Office action, the examiner states that claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Therefore, the applicant believes the amended claim 1 satisfies this condition.

Claims 2-3 and 5-9 are dependent on the amended claim 1 and should be allowed if the amended claim 1 is found allowable. Reconsideration of rejected claims 2-3 and 5-9 is politely requested.

Claim 10

The present application adjusts a polynomial function. The polynomial function representing a relationship between the read-back signal parameter and the writing power by shifting a characteristic curve iteratively according to **a difference value between a read-back signal parameter and a target read-back signal parameter** (please refer to Fig.5 and paragraph [0023]). Den Boef does discloses performing a shift by multiplying an intermediary power P_i utilizing a fixed constant h (where h is a pre-determined specific value) to determine an optimum writing power P_o, wherein the operation of the multiplication is performed only once in each optimum power evaluation process (col. 5, line 16 through col. 7, line 17). Boef does not teach that shifting the polynomial function, utilized by the present application, is performed according to the practical difference value instead of a fixed constant. This clarification overcomes the rejection under 35 U.S.C 102(b).

In addition, Kelly fails to teach or suggest techniques about shifting polynomial function according to a difference between a read-back signal parameter and a target read-back signal parameter. Therefore, this feature is not obvious for a person skilled in this art in view of Den Boef and Kelly's teachings.

Reconsideration of claim 10 is politely requested. Claims 11-18 are dependent upon claim 10 and should be allowed if claim 10 is found allowable.

New claim

Claim 19

Includes the limitation of reading the polynomial function from a database and includes the limitations of original claim 1. The amendments are fully supported by the specification in paragraph [0024]. No new matter is introduced.

Please refer to Fig.3 of Den Boef's disclosure. The construction method of the polynomial function disclosed by Den Boef is summarized as follows:

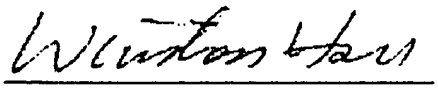
1. Writing a series of test patterns on the recording medium, each pattern with a different writing power level;
2. Reading the patterns to form corresponding read signals and fitting an m-P curve as shown in the upper side of Fig.3 through the measured values; and
3. Determining and normalizing a derivative curve of the m-P curve, the resulting normalized derivative curve is as shown in the lower side of Fig.3.

However, the present application constructs **a database of writing powers and read-back signal parameters in advance**, and retrieves a corresponding polynomial function from this database whenever writing data onto an optical disc (paragraph [0024]). Next, an iterative process is activated to determine an optimum writing power level of the

optical disc drive. On the contrary, the polynomial function of Den Boef's disclosure is generated **dynamically** during the process of writing power calibration. In other words, a final writing power level is acquired by: performing writing power tests with different writing power levels to each disc; reading back the writing results; generating an initial curve by a curve-fitting method; and differentiating and normalizing the initial curve to generate a final curve. Additionally, Kelly does not disclose related techniques regarding the generation of the polynomial function. Therefore, this feature of directly reading the polynomial function from a database is different from Den Boef and Kelly's teachings. As a result, a new claim, claim 19, is believed to be allowable. Consideration of claim 19 is politely requested.

Applicant hereby requests a timely allowance of the application.

Sincerely yours,



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Note: Please leave a message in my voice mail if you need to talk to me. The time in D.C. is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan).